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ABSTRACT

The purpose of this paper was to explore the extent to which differentials in occurrence and degree of disability existed among selected families of different ethnic types--Southern blacks in Texas, Spanish speaking farm migrants in California, Hawaiian Ethnics; and whites in Wisconsin and Vermont. Respondents were homemakers between the ages of 18 (younger if they were mothers of at least 1 child) and 65 having children in the household. The stimulus question for disability was "Is anyone in this family sick all the time or disabled in any way?" Interviews were completed in metropolitan areas for 294 homemakers in Texas, 202 in Hawaii, and 208 in Wisconsin. They were completed in nonmetropolitan areas for 259 homemakers in Texas, 169 in California, and 218 in Vermont. Data indicated that: (1) individual and family disability were influenced to a greater extent by ethnicity than by place of residence; (2) there were no significant differences in number of family members disabled according to place of residence or ethnicity; (3) place of residence affected the positional distribution of disability; and (4) place of residence differentials had a significant affect on the magnitude of disability. (KM)

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FAMILIES UNDER STRESS: AN INTERETHNIC COMPARISON OF DISABILITY AMONG SELECTED METROPOLITAN AND NONMETROPOLITAN FAMILIES*

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ABSTRACT

The purpose of this paper is to explore the extent to which differentials in occurence and degree of disability exist among selected families of different ethnic types--Southern Blacks in Texas, Spanish-speaking, farm migrants in California, Hawaiian Ethnics, and Whites in Wisconsin and Vermont. More specifically, the object is to evaluate the hypothesis that there will be significant variations in the incidence and degree of disability among family units by ethnic type.

Data for the study were collected as a part of an interstate regional project which explored the nature and magnitude of metropolitan-nonmetropolitan differentials in disability. Respondents were homemakers between the ages of 18 (younger if they were mothers of at least one child) and 65 having children in the household. The findings are reported and appropriate conclusions are drawn.

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THE PROBLEM

The purpose of this paper is to explore the extent to which ethnic differentials exist in magnitude and degree of family membership disability. The study will involve ethnic differentials in family disability in metropolitan areas of the United States among Texas Blacks, Hawaiian Ethnics, and Wisconsin Whites, and in nonmetropolitan areas of the United States among Texas Blacks; California, Spanish-speaking, farm migrants; and Vermont Whites. The basis for the research reported here is data gathered as a part of an interstate regional project which explored the nature and magnitude of metropolitan-nonmetropolitan differentials in disability.

Disability is a factor which affects individual members of a family and may also affect the family as a unit. The prime focus of this analysis will be effects of physical or mental handicaps, debilitating illness and deformity of family members upon the social and emotional well-being of the family as a unit.

Knowledge and understanding of the effects of ethnicity on the kinds of stress imposed upon the family be membership disability should

furnish (1) insight into the coping behavior of family members, and (2) some understanding into the nature of assistance which may promote stability of families and thereby enhance the future quality of living for family members.

A number of factors have been demonstrated through past research to influence the rate of disability. These factors include demographic and social variables such as age, sex, income, education, place of residence, cultural heritage, and perception of illness. Three major factors to be given primary conisderation, because of the nature of the populations in this study are regional location, place of residence, and ethnic type.

Differences in regional location and ethnic membership play an important role in determining whether populations receive medical care. Horton and Leslie (1965:589) point out that populations living in medical shortage areas receive less or poorer medical care than those living in other areas. They go on to point out that Southern States lacked an adequate number of physicians, dentists, and nurses when compared with Northern Central states (which have access to a greater number) and Northern states (which had the highest numbers of physicians, dentists, and nurses per number of patients of the three regions).

Rural areas, in addition, receive less or poorer medical care than urban areas. Rural people in the more sparsely populated areas have only about one-half the access to physicians, nurses, dentists, hospital beds, and other health resources when compared with the rest of the nation. The health problems of rural areas are further compounded by environmental hazards, an aging population, and a high degree of poverty. (Bible, 1973:1).

Studies indicate substantial class and ethnic variation in family disability. Horton and Leslie (1965) point out that low income groups (p. 590) and racial minorities (p. 593) receive less than adequate medical care. Ross (1962) states that one's decision to visit a physician may vary with income.

Past research indicates that cultural heritage may also bear upon how ethnicity affects one's desire to seek health, medical, and hospital services. Clark (1952:2) states that whenever individuals from one culture, with their particular beliefs about health, illness, and the prevention and cure of disease, come to live as members of a minority group within another culture which has a vastly different medical system, emotional and social conflicts often result when illness brings members of the two groups together.

While it is argued that health problems are attributed to the "culture of poverty" (Gerber, 1972) and that illness behavior of those in poverty is consistent, many social scientists agree that illness behavior may vary because of cultural heritage. Rosenstock (1959), suggests that one's decision to seek medical attention is determined by the extent to which a person sees a problem as having both serious consequences and a high probability of occurence. He also states that behavior is determined by goals and motives and that action will follow those motives which are perceived as most valuable. Cultural heritage may determine one's perception of an illness or disability. Because the "symptom" or condition is omnipresent (it always was and always will be) there simply exists for such populations or cultures no frame of reference according to which it could be considered a deviation. (Zola: 1966).

In addition, research shows that minority groups are underprivileged in terms of income. Level of family income has been demonstrated to have a differential effect upon a family's access to health services (Stitt, 1965:104). This factor is expected to differentiate between families with varying degrees of disability because of its influence upon the accessability of health, medical, and hospital facilities and services.

Social scientists feel the SES differentials also affect accessibility to health, medical, and hospital facilities.

Stitt stated:

> low income is often a deterrent to utilization of health care. Low income families are often inadequately immunized against preventable disease. They use other preventive medical services less than do high income families and do not get a proportionate amount of treatment hospital service (1965:104).

Ashley (1961:59) states that different attitudes and values in groups result in putting off needed health services. Of the families included in his study, those of the lowest income group were much more likely to give financial reasons for not taking advantage of health services.

Education is an important factor in determining the type of jobs available to the wage earners. This, in turn, determines the income level of the wage earner. Horton and Leslie (1965:3) state that the unemployment problem is in a large part an educational problem. Education may also determine the way in which information is assimilated within the family.[1/]

Evidence indicates that families in medical shortage areas, families who are members of disadvantaged ethnic groups, families with low incomes, and families with low educational levels are least likely

to obtain good quality health, medical, and hospital services. It is logical to assume that the more of these traits a family has, the higher the degree of family disability it will experience.[2/]

Specification of Research Objectives

In the study to follow, the following questions will serve to guide the analysis:

(1) To what extent do ethnic groups differ in frequency of disability among its family members? Secondarily, to the extent that can be determined here, how does place of residence location influence these differences?

On the conceptual level, it is necessary to define what one means by "abled" before arriving at a workable definition for disability. In this society, age groupings determine roles we are expected to perform. Generally, children near the age of five to near the age of eighteen, (sometimes the upper limit is extended to near age twenty-one because of college students) are expected to attend formal school for twelve years and graduate (the expanded upper limit takes into consideration those who are expected to go to college for four years and graduate): the population between the ages near eighteen to near sixty-five are expected to play or work or retire. If one is unable to perform the roles described above because of some mental, physical, or emotional problems, the person is labelled as disabled. From this conceptual definition of disability, the degrees of disability will be determined by ones ability to perform his designated function. Operationally, on an empirical level, disability should be measured by varying degrees of ableness to perform the function which the individ-

ual's age group is expected to perform (given the above conceptual definition of disability). In this study, the measures were of this nature.

Individual disability and family disability have been defined by previous research. These definitions will be employed in this study. Kuvlesky, Byrd, and Taft (1973:7) define individual disability as any abnormality of personality of biological structure or process that produces stress for the individual in his adjustment to himself or his external environment. They go on to state that whenever the stress which results from family member's inability to assume expected roles of family interaction impedes the maintenance of integration in the family system and/or negatively influences the unit's capability for adaptation to the total environment, the resulting patterns of interaction are labled family disability.

In this study, ethnic groups will be defined as groups in which members share a common cultural heritage different from that of the majority. The ethnic groups to be studied here are Blacks in the state of Texas, Hawaiian Ethnics, Spanish-speaking Farm Migrants in the state of California, and Whites in the states of Vermont and Wisconsin. All groups were American citizens with the exception of a large portion (78%) of the California population which was composed of Mexican citizens.

Instruments and Measures

Dimensions of family variables represent the key focus and dependent variable cluster in this study. A brief description of the indicators

and measurements used for each of these follows.

Disability

The stimulus question for disability was "Is anyone in this family sick all the time or disabled in any way?" If the respondent said there was, she was asked to describe the seriousness of the disability along the following lines:

FOR EACH PRE-SCHOOLER ASK:
Which of the following best describes his (her) ability to play?
5. Not able to take part at all in ordinary play with other children.
4. Able to play with other children but limited in amount of kind of play.
2. Not limited in any of the preceding ways.

FOR EACH CHILD IN SHCOOL ASK:
Which of the following best describes his (her) ability in school and activities?
5. Not able to go to school at all.
4. Able to go to school but limited in certain types of schools or in school attendance.
3. Able to go to school but limited in other activities.
2. Not limited in aly of the preceding ways.

FOR EACH OTHER FAMILY MEMBER ASK:
Which of the following best describes his (her) ability to work?
5. Not able to work (or keep house) at all.
4. Able to work (keep house) but limited in kind or amount of work.
3. Able to work (keep house) but iimited in other activities.
2. Not limited in any of the preceding ways. (NC-90 Patterns of Family Living Questionnaire, 1970:3).

The responses were coded "1" if the person was not disabled and "2" through "5" for the various degrees of disability indicated above. With "1" being the lowest degree of disability (none) and "5" being the highest (not able to work et cetera), the distinctions in the instrument were kept for the measures in this analysis. The "1" category was dropped for more definitive differentiations among the degrees of disability of disabled family members.

An apparent weakness of the disability measure is that no objective criteria is used to determine actual physical, mental, or emotional problems. Instead, the homemaker's subjective evaluation of the member's ability to perform was relied upon. The homemaker is probably the one who decides who is well enough to go out to play, go to school or work and she probably exerts her influence to keep family members at home when she believes they are too ill.

Ethnicity

Ethnicity was determined by interviewers who classified respondents according to observation. An apparent weakness of this measure is that ethnic types such as those in the Hawaiian sample (which included Japanese, Chinese, Korean, and Vietnamese) are easily confused. There is no objective criteria used to determine actual ethnic composition of the respondents since the subjective evaluation of the interviewer was relied upon.

Selection and Interviewing

In all of the states included in the study, the respondents were female homemakers not over 65 years of age, and not under 18 years of age (unless they were the mothers of at least one child) having children in the household. Interviews were conducted during 1970 and were completed in 1971. For this analysis, study populations were purified so that only families belonging to the selected ethnic groups were included in the study. Table 1 summarizes the disposition of families contacted during the interviewing process.

Texas

The metropolitan sample (one-half sample) was drawn from a predominately Black, low-income area (as determined by census information)

Table 1. Summary Interview Table

Study Populations

	M			NM		
	Texas	Hawaii	Wisconsin	Texas	California	Vermont
Number of Interviewers	12	5	5	6	17	7
Number Ineligible	500	189	755	287	21	233
Number of Interviews Completed	294	202	208	259	169	218
Refusals and Others*	8	159	21	13	45	124
Number belonging to selected ethnic group	294	167	205	259	167	216

*Includes evasions, vacant houses, respondents did not speak English, homemaker was never able to be contacted, e.g., because they were ill, because they evaded the interviewer, because they were away for the summer.

in an East Texas metropolitan area. The nonmetropolitan area consisted of a small town (about 5,000 population) and two small open-country villages in East Texas which were recommended by a consulting demographer.

In metropolitan Texas, 12 interviewers were enlisted from areas of the metropolis other than the sampling area. Of those interviews that were not completed, there were 500 ineligible households and eight refusals, evasions, et cetera.

In nonmetropolitan Texas, six interviewers were enlisted from a small town near the nonmetropolitan sampling area. Of those interviews that were not completed, there were 287 ineligible households and 13 refusals, evasions, et cetera.

Wisconsin

The sampling area consisted of five wards. This area was bordered by a lakefront, railroad yard, and a downtown area of the city. The sampling area housed approximately one-third of the population of the metropolis and one-third of the houses in this area had been recommended for Urban Renewal. The sample was comprised of the total population of the area described.

One interviewer was from an area of the metropolis other than the sampling area. Two interviewers were brought in from other areas of the state. Two hundred-eight households comprised the sample. Of those interviews that were not completed, there were 755 ineligible household, ten refusals, and 11 who managed to elude the interviewer.

Hawaii

The sampling area consisted of eight non-military census tracts in which 40 percent or more families had less than $5,000 income from 1964-1967. The sampling procedure was a random representative sample. Of the area sampled, every fifth house was screened; for multiple dwellings every fifth door was screened. Five hundred-fifty households were drawn for the sample; however, only 202 interviews were completed. Of those interviews that were not completed, 189 households were ineligible, 12 dwellings were vacant, 76 were refusals, 53 respondents were not at home, and 13 respondents did not speak English (the interviewers did not speak the language of the household).

Vermont

The sampling area consisted of 15 towns, which were selected randomly from all of the towns in the state. After the towns were selected, Vermont Highway Department maps were used to section the town into grid squares. The squares were then numbered randomly.

Each town had a quota of interviews based on the number of households recorded in the 1960 census. The squares were visited in order until the town quota was filled. In towns where there was an insufficient number of eligible families, the quota was filled by interviewing in other towns. In these towns, the town clerk advised as to where the low income families would be found.

The sample was comprised of 218 households. Of those interviewed, there were 233 ineligible households, 29 refusals, and 66 homes where the respondents were not at home.

Interviewers were 7 homemakers who were recruited from the area.

California

The sampling area was composed of twelve state-operated migrant camps. These camps were selected on the basis of the following criteria:

(1) They served the major farm labor-harvested and farm labor-processed crop areas of Central California.

(2) They were operating at a time which coincided with the projected schedule for Project NC-90.

(3) They were large enough in population to maximize efficiency of data gathering.

(4) They were within commuting distance from the research center.

Since the desired number of interviews was 200, the number of interviews from each camp was derived by dividing the total number of housing units (each a theoretical family) by 200. After the number of interviews desired from each camp was derived, a random number table was used to select a random assortment of units in each camp which was equal to four times the number of interviews desired. This was done to eliminate the necessity to re-draw samples if the first draw would not yield a sufficient number of interviews. Interviews were obtained only from the random list in the order of the list.

When data-collecting began, a revision of the sampling design was made to compensate for the southward movement of the migrants. As a result of this movement, the northmost camps were reduced in size while the southern camps absorbed the inflow of migrants. High priority was given to obtaining 200 interviews, hence, the heavy representation of southern camps in the total. The total goal of sample size 200 was

not reached, however, due to insufficient time to make the necessary number of contacts. Two hundred thirty-five contacts were made; 169 interviews were completed.

Because of the nature of the sample population, it was necessary that interviewers be girls or women who spoke Spanish and English. This was decided since it was evident that language was a critical factor and it was likely that race and sex might also be critical factors.

Interviews were conducted by seventeen interviewers. Of those interviewed, there were 31 units which were not occupied, 21 units which were ineligible, and 14 refusals.

Characteristics of Families

The respondents were metropolitan and nonmetropolitan, female homemakers. Table 2 summarizes characteristics of the families involved in the study.

Place of Residence

Twenty per cent of the Texas sample was non-farm families residing in the open country; the remainder was urban. In Hawaii and Wisconsin, the respondents or their families lived in lower-income areas of standard Metropolitan Statistic Areas (SMAS). The California sample was composed of migrant farm laborers. Seventeen per cent of the Vermont sample was rural, farm families, while 83% were non-farm families residing in the open country.

Table 2. Summary Description of Respondent Attributes by Percentage of Total Number

Study Population

	M			NM		
	Texas	Hawaii	Wisconsin	Texas	California	Vermont
	-------Per Cent----------			---------Per Cent----------		
Education						
College Graduates	0.3	2.5	5.8	3.5	0.0	4.6
High School Graduates	35.3	44.0	50.0	30.4	1.8	47.3
Less than High School	64.3	46.6	37.5	63.8	98.2	37.5
Age of Respondent						
Under 25	15.6	18.8	21.2	13.5	21.9	18.0
25 - 44	58.5	65.3	55.6	59.0	62.1	71.9
45 - 54	17.3	13.9	21.2	17.4	14.8	8.8
55 and Over	7.4	2.0	2.9	10.1	1.2	1.4
Family Size in Year Equivalent Persons						
4 or less	0.0	44.6	57.8	40.9	39.0	44.2
5 and over	100.0	55.4	42.3	59.1	61.0	55.8
Rooms of Living Space						
3 or less	12.2	14.9	5.9	19.4	47.4	3.8
4 - 7	84.7	84.1	84.3	79.0	52.6	72.0
8 or more	2.0	1.0	9.8	1.6	0.0	24.4
Toilet Facilities						
No flush toilet	.7	0.5	0.5	42.5	37.6	4.6
Share Flush toilet	1.3	1.0	1.0	.8	5.1	1.4
Own flush toilet	98.0	98.5	98.6	56.8	57.3	94.0

Table 2. (continued) 2

	M			NM		
	Texas	Hawaii	Wisconsin	Texas	California	Vermont
	----------Per Cent--------			----------Per Cent----------		
Provision of Water in House						
Hot and Cold Piped	98.0	99.0	100.0	53.7	52.3	90.3
Cold Piped	2.0	1.0	0.0	18.7	31.6	7.9
Percentage in Poverty	42.8	32.0	28.0	38.0	68.0	52.5
Family Income						
Under $4,000	50.4	18.3	30.6	36.0	62.1	16.6
$4,000 - $7,999	33.6	38.6	42.5	49.2	26.7	59.4
$8,000 - $11,999	12.8	25.3	20.7	12.0	8.3	18.9
$12,000 and over	3.2	17.8	6.2	2.8	3.0	5.1
Occupational Type of Main Income Source						
0. Not employed	24.5	23.3	No Information		4.3	3.2
1. Armed Forces	0.3	1.2			0.0	0.9
2. Unskilled	33.8	14.9			95.1	17.6
3. Semi-Skilled	23.2	17.3			0.0	23.2
4. Skilled	9.2	18.5			0.0	26.0
5. Clerical, Sales, Technicians	7.8	18.5			1.6	6.0

Table 2 (Continued) 3

	M			NM		
	Texas	Hawaii	Wisconsin	Texas	California	Vermont
	Per cent			Per cent		
Relation of Main Income Source to Respondent						
Respondent	56.8	29.9	No Information	28.9	0.6	4.6
Spouse	40.1	66.4		64.0	97.5	94.4
Son/Daughter	1.3	0.6		4.6	1.2	0.4
Parents/Parents-In-Law	1.0	0.0		1.1	0.0	0.4
Others	.7	3.9		1.1	0.6	0.0

Education of Respondents

In all states, except Texas and California, one-half or more of the respondents had finished high school. In Hawaii, 54 per cent of the sample had completed high school. Higher levels of education were less than 10 per cent for California, Texas, and Hawaii.

Twenty per cent or more of the respondents had not been educated past the eighth grade in California, Texas, and Vermont. Seven grades or less had been completed by a large proportion of respondents in California. "No grades completed" was the response of four per cent of the respondents in the migrant sample of California.

Age of respondent

In the samples most respondents were 25 to 44 years of age. In California and Wisconsin larger percentages of the total were under 25 years of age, while Texas had a large per cent of respondents who were 45 or older.

Respondents in California and Vermont tended to be younger than those in Texas. In nonmetropolitan Texas, one-tenth of the respondents were 55 to 64 years of age.

Size of Family

Family size was calculated in year-equivalent persons. Each month an individual was present in the family constituted a fraction of a year-equivalent person. The sum of the person-months represented that individual as a year-equivalent person. The sum of these year-equivalents for all persons who had resided in the home for at least one month was the measure used for the family size.

The California sample had the largest percentage of families falling into the category of 5.1 and over.

In California, Texas, Hawaii and Vermont, large proportions of the sample families fell into the category of 5.1 and over. In Wisconsin, more families fell into the category 2.1-3.0 making this category the category most indicated. In California sample, no families indicated a response for the "2 or less" category; in all other samples, responses were 3.5 per cent or less.

Size of Dwelling

In California, 54 per cent of the sample lived in dwellings of four to seven rooms, while 75 per cent or more of the sample for all other states lived in dwellings of four to seven rooms. Dwellings of three or fewer rooms were indicated by 47 per cent of the respondents in California, 19 per cent in Texas, 15 per cent in Hawaii, and less than 10 per cent in the remaining samples.

Seven room dwellings were indicated more often than any number by respondents in Wisconsin and Vermont. Three room dwellings were most common in Hawaii and California.

Flush Toilets

All or nearly all families had their own flush toilets with the exception of families in the California and Texas area, where the proportion with flush toilets was slightly over half of the samples. In all other samples the percentages were 1.4 per cent or lower. Approximately two-fifths of the respondents in California and Texas indicated "no flush toilet available" as the response.

Piped Water

In all of the samples except in California and Texas, all of almost all of the families had hot and cold piped water in their homes. In Texas and California, slightly over 50 per cent had hot and cold piped water available. However, a higher proportion of respondents in Texas than in California indicated the availability of piped cold water only.

Family Income

The California migrant sample had 64 per cent in the "Under $4,000" category and Texas had 35 per cent at this level. Hawaii had approximately 12 per cent in the highest level of $12,000 and over. More than one-half of the rural families of Vermont were in the $4,000 to $7,999 category. Lowest income concentrations were found in the urban low-income sample of Wisconsin (54%) as well as among the migrants in California (79%) and the Black families in Texas (63%).

Occupational Type of Main Income Source

In Hawaii 10 per cent of the husbands had not been employed in the last year. Nearly twenty per cent or slightly more of the husbands were represented in the unskilled occupations category with the exception of husbands in California where 98 per cent worked as unskilled laborers. In all samples except California, approximately one-half or more of the husbands were classified as either operative and semi-skilled or as skilled, clerical and sales. In Wisconsin and Hawaii, at least 20 per cent of the husbands indicated semi-professional or professional occupations. In Vermont, 14 per cent of the husbands indicated that they were proprietors of a business.

In the states of Wisconsin and Vermont, no persons other than the respondent or her husband were reported to be the main income source. Main income sources who were not the respondent or her husband usually indicated a response in skilled jobs. In the state of Hawaii, 60% indicated a response in the skilled laborer category as compared to 20% in the unskilled category.

Of the respondents who were employed, the respondents usually indicated responses for the unskilled category. In the state of Hawaii responses for "skilled; clerical and sales" category was slightly larger then the "unskilled" category.

Relationship of Main Income Source to Respondent

Only in metropolitan Texas did the respondent indicate that she was the main income source. In all other populations, the respondents indicated the spouse as the main income source more frequently than any other family member.

Analysis and Findings

The following questions will guide the analysis:

(1) To what extent do ethnic groups differ in frequency of disability among its family members?

(2) To the extent that can be determined here, how does M-NM place of residence influence these differences?

The analysis will focus on frequency and individuals affected by disability. A tabular presentation of the findings will be presented and discussed in the text.[3/]

Incidence of Disability

Family Disability -- Among the populations represented in the study, it was observed that family disability had the greatest impact upon Hawaiian ethnics (44%) while Spanish-speaking farm migrants experienced the lowest rate of family disability. (See Tables 3 and 4).

According to differentials by place of residence, it is noted that Blacks in metropolitan and nonmetropolitan areas do not differ substantially with regard to disability while place of residence is controlled. However, it is noted that Blacks are affected proportionately approximately twice as much by disability as white families are regardless of place of residence.

When controlling on race, it is noted that the rates of family disability for whites and Blacks are slightly higher in nonmetropolitan areas than in metropolitan areas.

Individual Disability -- Substantial differences in individual disability were observed with Hawaiian ethnics having the highest incidence of disability (18%) and Spanish-speaking, farm migrants in California having the lowest incidence (1%).

According to differentials by place of residence, it is noted that Blacks in metropolitan and nonmetropolitan areas do not differ substantially with regard to percentage of disabled individuals. Whites, also, do not differ substantially with regard to disability while place of residence is controlled. When a comparison by place of residence of the number of Blacks and whites affected by disability is made, Blacks experience disability proportionately twice as much as whites. In short, it is observed that patterns of variations in the incidence of individual disability are essentially the same as in family disability.

Table 3. Percentage Distribution of Families With Disabled Members, No Disabled Members, and No Response

Families With:	M			NM		
	Texas	Hawaii	Wisconsin	Texas	California	Vermont
	Percent					
1. Disabled Members	23.5	43.8	11.12	29.0	4.2	17.1
2. No Disabled Members	76.5	56.2	88.8	71.0	95.8	82.9
3. No Response	00.0	00.0	00.0	00.0	00.0	00.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

a) $X^2_M = 53.06$ df = 2

b) $X^2_{NM} = 41.67$ df = 2

c) $X^2 = 102.94$ (all columns) df = 5

*X^2 excludes no response

Table 4. Percentage Distribution of Individuals With A Disability No Disability, and No Response

	M			NM		
Individuals With	Texas	Hawaii	Wisconsin	Texas	California	Vermont
	Percent					
Disability	06.9	18.4	03.0	07.3	01.0	04.3
No Disability	93.1	81.6	97.0	92.6	99.0	95.7
No Response	00.0	00.0	00.0	00.0	00.0	00.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

a) $X^2_M = 144.88$ df = 2

b) $X^2_M = 53.22$ df = 2

*X^2 excludes no response

c) $X^2 = 280.51$ (all columns) df = 5

It is observed that while the proportion of individuals affected by disability is small, the proportions of families affected by disability is much larger (in some cases the ratio was approximately 4 to 1).

Number Disabled

A vast majority of families in the study reported only one family member disabled. However, although a very few of the families had as many as three disabled family members, the number of disabled individuals per family ranged as high as eight in the Hawaiian ethnic population.

There were no marked variations in number of disabled among the nonmetropolitan populations. When controlling by place of residence, there were no substantial variations in whites and Blacks. When controlling by race, little metropolitan and nonmetropolitan differences were observed in the Blacks and in the whites. (See Table 5)

Degree of Disability

It is observed that while the Hawaiian ethnic population experienced the greatest incidence of individual and family disability, it also had the largest percentage (66%) of individuals who were not limited by their disabilities. Wisconsin whites and nonmetropolitan Texas Blacks experienced the highest proportions of individuals with very acute disability: prohibiting employment. California, Spanish-speaking, farm migrants experienced the largest percentage of individuals with disability who were able to work but were limited in the type of work. (See Table 6).

There were no significant nonmetropolitan differences in degree of disability. With the exception of the Hawaiian Ethnics, there were no

Table 5. Percentage Distribution of Families With 1, 2, and 3* of Their Family Members Disabled

Number in Family Disabled	M			NM		
	Texas	Hawaii	Wisconsin	Texas	California	Vermont
	Percent					
1	75.0	45.2	82.6	69.3	71.4	81.1
2	17.6	20.5	13.0	25.3	14.3	13.5
3	7.4	34.3**	4.4	5.4	14.3	5.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

a) $X^2_M = 23.68$ df = 4

b) $X^2_{NM} = 1.75$ df = 2

c) $X^2 = 42.85$ df = 10

*Include families with 3 or more disabled members.

**In the Hawaii sample, there was one family in which there were 8 individuals who were disabled.

Table 6. Percentage Distribution of the Degree of Disability of Individuals With Disabilities

Degrees of Disability	M			NM		
	Texas	Hawaii	Wisconsin	Texas	California	Vermont
	Percent					
1. Not Limited	12.9	65.9	28.6	12.7	10.0	11.0
2. Able to Work but Limited in Other Activities	23.7	06.5	17.8	22.6	30.0	25.0
3. Able to Work but Limited in Type of Work	41.9	20.0	25.0	36.3	50.0	47.0
4. Not Able to Work	21.5	07.6	28.6	28.4	10.0	17.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

a) $X^2_M = 76.66$, $df = 6$

b) $X^2_{NM} = 0.09$, $df = 2$

c) $X^2 = 140.88$ (all columns), $df = 5$

significant metropolitan differences in degree of disability.

Positional Distribution of Disability

Metropolitan Texas Blacks experienced the greatest percentage of respondents who were disabled while Spanish-speaking, farm migrants in California experienced the smallest percentage. (See Table 7).

When controlling by place of residence, it is observed that there are no substandial differences in Blacks or whites according to the amount of disability experienced by respondents. However, among whites, the percentage of disability among metropolitan whites in Wisconsin is more than twice that of nonmetropolitan whites. No substantial differences were observed in metropolitan and nonmetropolitan Blacks.

Spouses experienced the greatest percentage of disability in the metropolitan white population and the least disability among the Spanish-speaking, farm migrants.

When controlling for place of residence, no substantial difference exists. In metropolitan and nonmetropolitan populations spouses are affected approximately three to four times more among whites than Blacks.

When controlling for race, it is noted that there are no substantial differences in whites or in Blacks.

Spanish-speaking, farm migrants in California experienced the greatest amount of disability among children while Hawaiian Ethnics had the least amount (67% as compared to 3%).

When controlling by place of residence, metropolitan and nonmetropolitan differences are substantial in that metropolitan Blacks, experience twice as much disability in children as metropolitan whites.

Table 7. Percentage Distribution of the Relation of Disabled Family Members to the Female Homemaker

Relation to Female Homemaker	M			NM		
	Texas	Hawaii	Wisconsin	Texas	California	Vermont
	Percent					
Respondent	40.7	39.4	26.3	34.8	11.0	11.9
Spouse	12.3	30.3	52.6	14.6	11.0	47.6
Son/Daughter	29.6	03.0	15.8	24.7	67.0	35.7
Parent/Parent-In-Law	07.4	06.1	5.3	21.4	11.0	02.4
Others**	10.0	21.2	0.0	4.5	00.0	02.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

a) $X^2_M = 26.57$, df = 8

b) $X^2_{NM} = 31.79$, df = 6

c) $X^2 = 62.13$, df = 15

*NM X^2 run excluding "others"

**Total X^2 run excluding "others"

When controlling by race, differences in disability are not substantial for Blacks; however, nonmetropolitan whites experience twice as much disability as metropolitan whites.

Summary of Findings and Conclusions

A summary of the analysis will be reported in the following areas: incidence of disability, degree of disability, positional distribution of disability, and magnitude of disability.

Incidence of Disability --

Findings:

(1) There were no M-NM differences among Blacks and whites in family disability by place of residence.

(2) Blacks are affected by disability proportionately approximately twice as much as whites.

(3) Hawaiian Ethnics experienced a substantially larger, percentage of family disability (44%) than Spanish-speaking, migrant farmers (4%) who were affected by disability at a rate of one eleventh that of Hawaii.

(4) Patterns of variations in individual disability are essentially the same as in family disability.

(5) A larger proportion of families are affected by disability than are individuals.

Conclusion

Individual and family disability are influenced to a greater extent by ethnicity than by place of residence. Family disability is more prevalent than individual disability.

Number of Members Disabled

Findings:

(1) Families affected by disability tended to have one disabled

member who was generally the homemaker or her spouse in M areas. In NM areas the disabled member was the child or the homemaker.

(2) There were no substantial differences in number of disabled when controlled by race.

(3) Hawaiian ethnics experienced the broadest range of number of disabled since it was observed that one family had as many as eight family members who were disabled.

Conclusion:

There were no significant differences in number of family members disabled according to place of residence or ethnicity.

Positional Distribution of Disability

Findings:

(1) In M areas, disability was experienced most frequently by the respondent (homemaker) or her spouse. In NM areas, disability was experienced more frequently by the children of the respondent.

(2) M whites experienced a slightly larger percentage of disability than NM whites. However, there were no substantial M-NM differences among Blacks.

Conclusion:

Place of residence affects the positional distribution of disability.

Degree of Disability

Findings:

(1) Although the Hawaiian ethnics had the greatest incidence of disability, it had the largest proportion of individuals who were not limited by disability.

(2) M-NM differentials in disability indicate that NM populations are affected more acutely by disability than M populations.

Conclusion:

Place of residence differentials had a significant affect on the magnitude of disability.

DISCUSSION

Data indicate that Hawaiian Ethnics had a disproportionately high incidence of family and individual disability. However, data indicate that according to individual degrees of disability, this same population seems least disabled since approximately two-thirds of the disability reported by this group was minor. Because of the above observations, we can question the measure for disability. Should we rely upon the homemakers' subjective evaluation of disability? Should the degrees of disability be more clearly defined? Should allowances be made for subcultural based understanding of what constituted disability?

To further substantiate the need for a more thorough measure of family disability, data indicate that the Spanish-speaking, farm migrants experience the least incidence of disability. When disability was present, it was usually the child who was affected by disability. Because of the nature of this mobile population, it is logical to assume that some disabled family members were left at a more permanent residence and were not reported as part of the household when interviewed in magrant camps. If this is the case, disabled family members are isolated from the rest of the family for much of the year. Therefore, should allowances be made for variations in defining "family" before family disability can be measured?

Perhaps, the greatest contribution made here is in providing the

first basis for broad cross-ethnic generalizations about the nature and magnitude of family disability in the United States. For instance, it seems safe to predict that a substantial proportion of families of any ethnic type, regardless of regional location, will be subject to some degree of family membership disability.

FOOTNOTES

1. Information assimilation is seen as a major determining factor in knowledge of what signifies an illness or injury needing treatment, modern cures available, and the location of medical services and how they may be obtained.

2. Since each of the above factors have been demonstrated to have influence on the accessability to health, medical and hospital facilities and services, it assumec that the more these characteristics a family has the less likely they are to have access to these facilities and services. At this point an empirically unfounded but apparently logical assumption is espoused: the less access a family has to health, medical, and hospital facilities and services, the greater the probability that family will experience disatiliby among its members. Taking this assumption, the more characteristics which lessen access a family has, the higher the degree of disability the family will experience. In this study only a portion of this proposition will be explored (See question 3).

3. In X^2 analysis, expected values of three or more were considered adequate in agreement with Ostle (1963:12). If the degrees of freedom were five or greater, expected values of one or more were considered adequate for a conservative X^2 test in agreement with Lewontin and Telsenstein (1965).

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